

THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (Canceled)

Claim 23 (Currently Amended): A relay apparatus for delivering live video stream data from a server having an image sensing device to clients via a network, comprising:

a connection management device adapted to make a connection with the server having the image sensing device via the network[, in case that the connection has not been established with the server when a request is received from a client, not to make another connection with the server in case that the connection has been established with the server when the request is received from the client] and to get the live video stream data from the server having the image sensing device;

a memory control device adapted to store the live video stream data from the server having the image sensing device, in a buffer memory; and

~~a deliver device adapted to deliver the live video stream data stored in the buffer memory via the network;~~

~~wherein said deliver device delivers the live video stream data stored in the buffer to a first client without starting a new connection between the relay apparatus and the server, in case that a connection has been established between the relay apparatus and the server to deliver the live video stream data to a second client different from the first client.~~

~~wherein the deliver device determines~~ determine whether the deliver device receives a ~~second request requests each from a first client and a second client different from the first client~~ within a predetermined period ~~after the deliver device receives a first request from a first client,~~

~~and delivers to deliver~~ the same video data of the live video stream data ~~stored in the~~ buffer to the first and second clients in case that the deliver device receives ~~the requests each the~~ second request from the ~~first and second clients~~ client within the predetermined period, and

~~wherein the connection management device delivers to deliver~~ new video stream data of the live video stream data to the second client by requesting the server to send the new video data ~~in case that the deliver device receives the second request from the second client after the~~ predetermined period by requesting the server to send the new video data in case that the ~~reception of at least one of a request from the first client and a request from the second client exceeds the predetermined period.~~

Claim 24 (Previously Presented): The apparatus according to claim 23, wherein a protocol between the relay apparatus and the clients is HTTP.

Claim 25 (Previously Presented): The apparatus according to claim 23, wherein the connection management device converts a first format of the video stream data to a second format for the clients.

Claim 26 (Canceled).

Claim 27 (Previously Presented): The apparatus according to claim 23, wherein the predetermined period is a period between the point where the deliver device receives a request from one of the first and second clients and the point where the deliver device receives a next request from the other of the first and second clients.

Claim 28 (Currently Amended): The relaying method to deliver live video stream data from a server having an image sensing device to clients via the network, comprising the steps of:

making a connection between a relay apparatus and the server having the image sensing device via the network in case that the connection has not been established with the server when a request is received from a client, and not to make another connection with the server in case that the connection has been established with the server when the request is received from the client,

getting the live video stream data from the server having the image sensing device and storing the live video stream data in a buffer memory, ~~wherein the live video stream data stored in the buffer memory is delivered to a first client without starting a new connection between the relay apparatus and the server, in case that a connection has been established between the relay apparatus and the server to deliver the live video stream data to a second client different from the first client;~~

determining whether requests ~~each~~ a second request from the first client and the ~~a~~ second client ~~are~~ is received within a predetermined period after a first request from a first client is received,

delivering the same video data of the live video stream data stored in the buffer memory to the first client and the second client via the network, in case that the ~~requests each~~ second request from the ~~first and second clients are~~ client is received within the predetermined period, requesting the server to send new video data of the live video stream data, in case that ~~reception of at least one of the request from the first client and the~~ second request from the second client is received after ~~exceeds~~ the predetermined period[;], and delivering the new video data of the live video stream to the second client.

Claim 29 (Previously Presented): The method according to claim 28, wherein a protocol between the relay apparatus and the clients is HTTP.

Claim 30 (Previously Presented): The method according to claim 28, wherein a first format of the video stream data is converted to a second format for the clients.

Claim 31 (Canceled).

Claim 32 (Previously Presented): The method according to claim 28, wherein the predetermined period is a period between the point where a request from one of the first and second clients is received in the relay apparatus and the point where a next request from the other of the first and second clients is received in the relay apparatus.

Claim 33 (Currently Amended): A storage medium to store computer program to execute a relaying method to deliver live video stream data from a server having an image sensing device to clients via a network, the computer program comprising the codes of:

making a connection between a relay apparatus and a server having the image sensing device via the network in case that the connection has not been established with the server when a request is received from a client, and not to make another connection with the server in case that the connection has been established with the server when the request is received from the client,

getting the live video stream data from the server having the image sensing device and storing the live video stream data in a buffer memory, ~~wherein the live video stream data stored in the buffer memory is delivered to a first client without starting a new connection between the relay apparatus and the server, in case that a connection has been established between the relay apparatus and the server to deliver the live video stream data to a second client different from the first client,~~

determining whether ~~requests each from the first client and a second request from a the~~ second client are is received during within a predetermined period after a first request from a first client is received,

delivering the same video data of the live video stream data stored in the buffer memory to the first client and the second client via the network, ~~in case that the requests each from the first and second clients are~~ second request from the second client is received within the predetermined period via the network,

requesting the server to send new video data of the live video stream data, in case that ~~the reception of at least one of a request from the first client and a~~ the second request from the second client ~~exceeds~~ is received after the predetermined period, and
delivering the new video data of the live video stream data to the second client.

Claim 34 (Previously Presented): The storage medium according to claim 33, wherein a protocol between the relay apparatus and the clients is HTTP.

Claim 35 (Previously Presented): The storage medium according to claim 33, wherein a first format of the video stream data is converted to a second format for the clients.

Claim 36 (Canceled).

Claim 37 (Previously Presented): The storage medium according to claim 33, wherein the predetermined period is a period between the point where the deliver device receives a request from one of the first and second clients and the point where the deliver device receives a next request from the other of the first and second clients.